

1. A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the tool generating an acceleration of the fan motor in an axial direction away from the workpiece upon a combustion in the chamber and a subsequent reciprocal axial acceleration of the fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the tool, comprising:

an elastic member disposed within the tool and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the acceleration; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the fan motor.

2. The suspension mechanism of claim 1 wherein said elastic member is disposed directly between the fan motor and the cylinder head.

3. The suspension mechanism of claim 1 wherein said elastic member is in direct contact with the motor.

4. The suspension mechanism of claim 2 wherein at least a portion of said restraining member is disposed radially outwardly of the fan motor.

5. The suspension mechanism of claim 1 wherein said elastic member comprises an integral piece.

6. The suspension mechanism of claim 5 wherein said elastic member comprises an elastomer.

7. The suspension mechanism of claim 1 wherein said restraining member comprises a metal clip.

8. The suspension mechanism of claim 7 wherein said restraining member has an arcuate shape.

9. A combustion-powered tool for driving a fastener into a workpiece, the tool comprising:

a combustion chamber defined at least in part by a cylinder head;

a combustion chamber fan having a motor, the motor being disposed within the cylinder head, the tool being configured to generate an acceleration of the motor in an axial direction away from the workpiece upon a combustion in

said combustion chamber and a subsequent reciprocal axial acceleration of the motor, at least one of the accelerations causing the motor to oscillate;

an elastic member disposed within the cylinder head and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the acceleration; and

a restraining member mounted to the cylinder head and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the motor.

10. The combustion-powered tool of claim 9 wherein said elastic member comprises an integral piece.

11. The combustion-powered tool of claim 9 wherein said elastic member is in direct contact with the motor.

12. The combustion-powered tool of claim 10 wherein said elastic member comprises an elastomer.

13. The combustion-powered tool of claim 9 wherein at least a portion of said restraining member is disposed radially outwardly of the motor.

14. The combustion-powered tool of claim 9 wherein said restraining member comprises a metal clip.

15. The combustion-powered tool of claim 14 wherein said restraining member has an arcuate shape.